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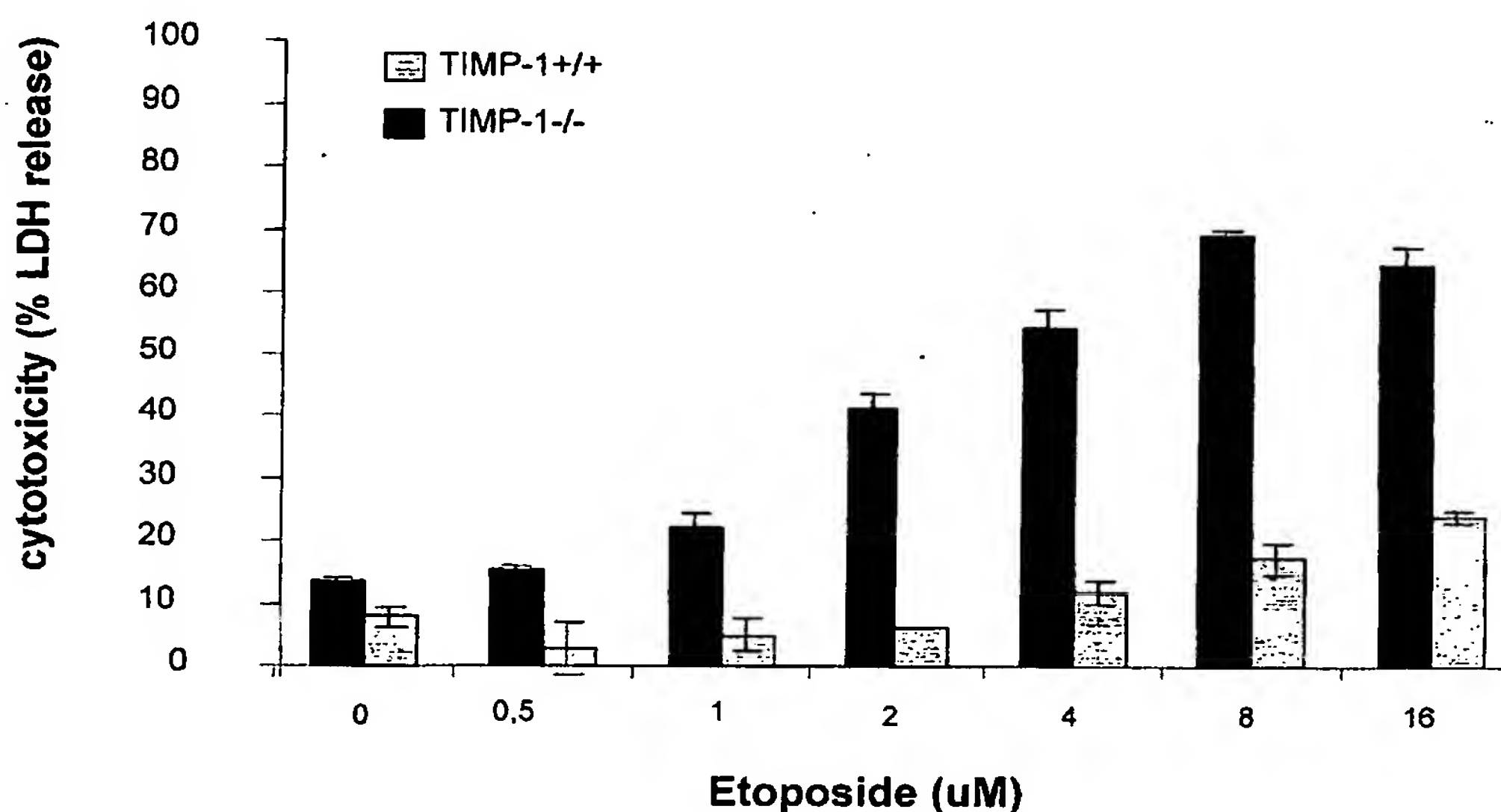
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(54) Title: IMPROVEMENTS IN CANCER TREATMENT AND CANCER TREATMENT EFFICACY PREDICTION BY BLOCKING AND DETECTING PROTEASE INHIBITORS



(57) Abstract: Disclosed is a method for improving cancer therapy that relies on induction of apoptosis in malignant cells. It has been found that docking of protease inhibitors PAI-1 and TIMP-1 renders malignant cells expressing these inhibitors more sensitive to apoptosis, whereas non-malignant cells do not change their sensitivity to apoptosis induction. It is therefore possible to increase the effect of various anti-cancer treatments in a rational manner and to predict whether or not an apoptosis-inducing cancer treatment will be effective in a patient or not. The invention also provides for methods of identifying agents that inhibit the apoptosis sensitivity modulating effects of protease inhibitors and to methods of identifying anti-cancer compounds that are not dependent on an apoptosis inducing mechanism which can be modulated by protease inhibitors.

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